

REMARKS

With regard to the Examiner's comments on pages 2 and 3 of the Attachment to the Advisory Action dated July 25, 2003, Applicants respond as follows.

The Examiner maintains that Cook (U.S. Patent No. 6,155,664) discloses that a simultaneous measurement of the ink level is obtained by a level sensor and a counter, and that these values are compared to determine if the counter is working properly. The Examiner further maintains that the refill of ink occurs only in the condition that both the sensor and the counter indicate a low ink level.

However, Applicants respectfully disagree with the Examiner. For example, in Cook, the printer controller 36 compares the measured primary ink level value with a stored primary ink level value (step 160). If the ink level values do not match, the printer controller determines that either one or more primary ink level sensors 30a-30b have failed or an inaccurate primary ink level value was stored (col. 14, lines 22-59). The printer controller 36 then generates a system fault message indicating that user service is required (step 163). This comparison is performed for confirming whether the printer works properly, not for determining whether a refill operation is required or not. In particular, no ink is supplied or refilled upon completion of this comparison, as required by the claims.

Further, the refill operation disclosed in Cook is performed based on only the primary drop count value, not both the primary drop count value and the output of the primary ink level sensors 30a-30b. For example, the ink level sensors 30a-30b are used only for detecting an ink "full" state, i.e. to indicate whether primary ink reservoir 4 has become full or not, during ink

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transfer from secondary reservoir 10 to primary reservoir 4 (col. 15, lines 53-62). In other words, the printer controller 36 refers to the values of ink level sensors 30a-30b, after a supply of ink has already begun. Therefore, ink level sensors 30a-30b are not used as a condition to commence the supply of ink in an ink refill operation.

Accordingly, Applicant submits that Cook fails to disclose that, when the ink level detector detects the low ink state and the value acquired by the ink consumption counter reaches a predetermined count value, ink is supplied to the sub-tank by the ink cartridge, as recited in the claims.

Entry and consideration of this Preliminary Response are respectfully requested.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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